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***NOTE ON A NEW ROTIFIER.--GAMPHOGASTER AREO-  
LATUS.***

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BY C. M. VORCE, F. R. M. S.

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At the meeting of this Society in Elmira in 1882, I mentioned, giving a brief description and figures, a new, and in many respects remarkable Rotifer. (Vol. V, page 187.) At that time I had had only sufficient time for the examination of the literature of the subject to satisfy myself that this Rotifer was new and undescribed, and also to learn, by search for additional specimens, that it was extremely rare. A single specimen only had been found, taken living in filterings from the water of Lake Erie, at Cleveland, Ohio, and was kept under observation in a live-box so long that it was fairly to be presumed that all the details of its structure which could be observed in that one specimen in the living state were noted and recorded.

Subsequent search and correspondence confirm the conclusion that it was never described or figured before the publication referred to, nor observed by others so far as can be ascertained. I therefore deem it proper to now formally describe and publish the genus and species, both of which are new, and although the limited search for new specimens which I have been able to make has not yielded any additional specimens, the original form having been kept and studied so long and the carapace permanently preserved, I feel fully justified in publishing the description from that specimen, especially as precedent is not wanting for such course. The description both of genus and species, but particularly the

former, must necessarily be to some extent provisional, although the characters of the type specimen are so marked and distinct as to render the necessity for revision quite unlikely. I therefore propose the following description:

GOMPHOGASTER. gen. nov. Carapace thick, box-like, enclosing the animal completely except for a narrow slit-like opening upon the anterior ventral portion, extending in the type specimen for about one-half the total length of the carapace; carapace cuneate in both dorsal and lateral aspects, doubly so in the type specimen; carapace triangular in transverse section, the ventral side apical; foot strong, jointed, and usually retracted within the carapace, toe apparently single; trochal disc apparently single, cilia robust set in a single (?) marginal row, disc not much expanded beyond carapace when extended; a stout, retractile horn-like process protruded from each dorso-lateral corner of the carapace when trochal disc is extended; eye spot single (?) located well below trochal disc; mastox small but apparently powerful.

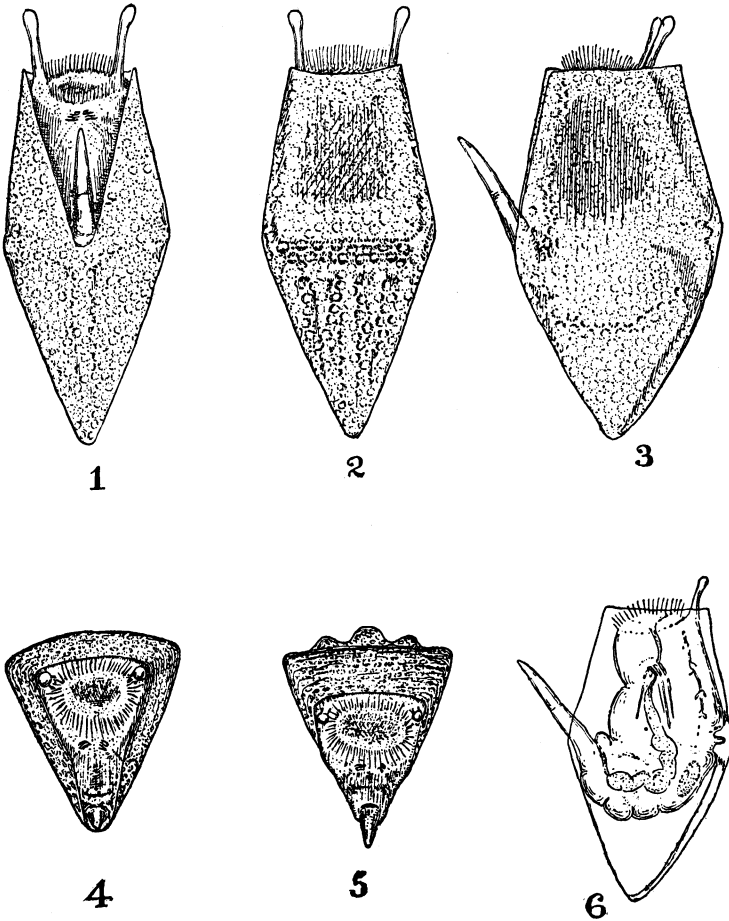
Animal very active, strong and apparently voracious. Habitat, fresh water.

*Gomphogaster areolatus*, sp. nov. Carapace thick and strong, dark colored, marked all over with areolar depression, very much resembling the markings of *Heimaulus*, or *Trinacnea*; sides slightly concave, a deep plicate furrow across back at widest part, from which two deep sub-central furrows and two shallow sub-marginal furrows extend upon dorsal surface to posterior tip of carapace, lateral margins of the dorsal front of carapace slightly produced making the corners prominent. Foot stout, two-jointed, toes apparently single, retractile horns very slightly elevate. Eye spot not observed, but if present would be concealed by the dark carapace under usual condition of extension of the animal. Mastox near mouth. Cilia of the trochal disc robust, in a single (?) marginal row. Animal very active and strong, pushing its way among masses of diatoms and flocculent matter, and when

entangled forcing itself by vigorous kicks with its strong foot. In water of Lake Erie, Cleveland, Ohio, a single specimen, July 2, 1882.

**EXPLANATION OF PLATE.**

- FIG. 1.—Ventral aspect.  
FIG. 2.—Dorsal view, showing the ridges and furrows upon the back.  
FIG. 3.—Side view showing foot, and the transverse dorsal folds.  
FIG. 4.—Frontal view, showing oval cavity.  
FIG. 5.—Frontal view, the body inclined toward the ventral aspect, showing the ridges and furrows of posterior dorsal surface.  
FIG. 6.—Diagrammatic figure, on slightly smaller scale, showing supposed structure of the body and position of the parts in relation to the carapace. The *position* of the mastox observed; its structure not satisfactorily made out; the other internal parts judged of by movements thought to be seen, but not clearly made out. The dark color of the carapace and persistence of the Rotifer in keeping the dorsal surface uppermost prevented satisfactory observation of internal parts. The most violent kicks made with the foot do not protrude it further than shown in FIGS. 3 and 6, which indicate an attachment of the body to the carapace at or near the margin of the ventral cleft, as indicated in FIG. 6.



GOMPHOGASTER AREOLATUS,  $\times 200$ .